



**GENERAL NOTES:**

1. SWALE DESIGN WIDTH AND DEPTH WILL VARY AS REQUIRED TO PROVIDE ADEQUATE TREATMENT STORAGE FOR THE GIVEN STORM VOLUME.
2. DRY WELL/INLET SHALL BE INSTALLED A MINIMUM OF 8 FT FROM THE NEAREST INLET TO PREVENT DIRECT INFLOW INTO THE OVERFLOW GRATE. PROVIDE A MINIMUM OF 3" FREEBOARD BETWEEN THE LOWEST SWALE INLET AND THE BASE OF THE TOP OF THE BEEHIVE GRATE.
3. SWALES WITH LONGITUDINAL SLOPE STEEPER THAN 2% SHALL HAVE CHECK DAMS INSTALLED.
4. PROVIDE A MINIMUM 1 FT FLAT AREA ADJACENT TO SIDEWALK WHEN USING A SIDE-SLOPE NO STEEPER THAN 3:1. IF FLAT AREA IS NOT PROVIDED ADJACENT TO SIDEWALK, THEN USE A SIDE-SLOPE NO STEEPER THAN 4:1.
5. NO COMPACTION IN SWALE BOTTOM.
6. SWALES SHALL BE GRASSED OR THE CITY OF MISSOULA STORM WATER DEPARTMENT CONSULTED FOR PROPER PLANT SELECTION IN SWALE.

**APPROVED BIOSWALE PLANTINGS**

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| <p><b>GRASSES</b></p> <ul style="list-style-type: none"> <li>• BLUEBUNCH WHEATGRASS, PSEUDOROEGNERIA SPICATA</li> <li>• TUFTED HAIRGRASS, DESCHAMPSIA CESPITOSA</li> <li>• WESTERN WHEATGRASS, PASCOPYRUM SMITHII</li> <li>• SANDBERG'S BLUEGRASS, POA SECUNDA</li> <li>• SLENDER WHEATGRASS, ELYMUS TRACHYCAULUS</li> </ul> | <p><b>FORBS</b></p> <ul style="list-style-type: none"> <li>• BLANKETFLOWER, GALLARDIA ARISTATA</li> <li>• YARROW, ACHILLEA MILLEFOLIUM</li> <li>• SHOWY MILKWEED, ASCLEPIAS SPECIOSA</li> </ul> | <p><b>SHRUBS AND TREES</b></p> <ul style="list-style-type: none"> <li>• RUBBER RABBITBRUSH, ERICAMERIA NAUSEOSA</li> <li>• SILVER BUFFALOBERRY, SHEPHERDIA ARGENTEA</li> <li>• GOLDEN CURRANT, RIBES AUREUM</li> <li>• SNOWBERRY, SYMPHORICARPOS ALBUS OR OCCIDENTALIS</li> <li>• SKUNKBUSH SUMAC, RHUS TRILOBATA</li> </ul> |
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Engineering Division

**Bioswale**

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